Application No.: 10/539,739 Docket No.: 4590-420

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

 (Currently amended) A device for regulating the temperature of a heating wire, the device comprising:

an electronic switch connected in series with the heating wire,

means for controlling the electronic switch,

wherein the device also comprises means for controlling a switching time of the electronic switch wherein the switching time is a time necessary for the switch to transition from one state to assume another; and

wherein the control means for controlling the switching time of the electric switch controls a <u>eentrol</u> <u>setpoint</u> voltage applied to the switch as a function of a setpoint voltage so as to prolong the period required for the switch to transition from one steady state to another.

- 2. (Previously Presented) The device as claimed in claim 1, comprising: means for measuring a temperature of the heating wire, wherein the control means turn the electronic switch on and off as a function of the temperature of the heating wire.
- 3. (Previously Presented) The device as claimed in claim 2, wherein the means for measuring the temperature of the heating wire comprise means for comparing a voltage present at a common point between the electronic switch and the heating wire with a reference voltage.
- 4. (Previously Presented) The device as claimed in claim 1, wherein the control means define the switching time that is variably prolonged as compared to a normal switching time of the electronic switch taken in isolation.
- 5. (Previously Presented) The device as claimed in claim 1, wherein the control means comprise an operational amplifier, wherein a first input is connected to a common point of the

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heating wire and of the electronic switch, wherein a second input receives the setpoint voltage and wherein an output controls a turning-on and a turning-off of the electronic switch.

- (Previously Presented) The device as claimed in claim 2, wherein the control means define the switching time longer than a normal switching time of the electronic switch taken in isolation.
- 7. (Previously Presented) The device as claimed in claim 3, wherein the control means define the switching time longer than a normal switching time of the electronic switch taken in isolation.
- 8. (Previously Presented) The device as claimed in claim 2, wherein the control means comprise an operational amplifier, wherein a first input is connected to a common point of the heating wire and of the electronic switch, whereof a second input receives the setpoint voltage and wherein an output controls the turning-on and the turning-off of the electronic switch.
- 9. (Previously Presented) The device as claimed in claim 3, wherein the control means comprise an operational amplifier, wherein a first input is connected to the common point of the heating wire and of the electronic switch, wherein a second input receives the setpoint voltage and wherein an output controls the turning-on and the turning-off of the electronic switch.
- 10. (Previously Presented) The device as claimed in claim 4, wherein the control means comprise an operational amplifier, wherein a first input is connected to a common point of the heating wire and of the electronic switch, wherein a second input receives the setpoint voltage and wherein an output controls the turning-on and the turning-off of the electronic switch.